

**REMARKS**

Claims 5, 7, 10, 13-16, 20, 22, 24, 27, 30, 32-33, and 44-46 were previously cancelled without prejudice or disclaimer. Claims 1, 11, 23, and 25 have been amended. Claim 48 has been added. No new matter has been added. Accordingly, claims 1-4, 6, 8, 9, 11, 12, 17-19, 21, 23, 25, 26, 28, 29, 31, 34-43, and 47-48 are pending.

**Claims 1, 3, 11, 21, 23, 26, 29, 31, and 34-38 are Allowable**

The Office has rejected claims 1, 3, 11, 21, 23, 26, 29, 31, and 34-38, under 35 U.S.C. §103(a), as being unpatentable over U.S. Pat. Pub. No. 2003/0117501 (“Shirakawa”) in view of U.S. Patent No. 5,898,459 (“Smith”). Applicants respectfully traverse the rejections.

**Claims 1, 3, 35 and 36**

The cited portions of the above-cited references do not disclose or suggest the specific combination of claim 1. For example, the cited portions of the above-cited references do not disclose or suggest a plurality of image sensor lens modules, each of the plurality of image sensor lens modules having a field of view, where the fields of view of the plurality of image modules overlap to form a panoramic view of a scene covering three hundred sixty degrees, as in claim 1.

Shirakawa describes a camera device that captures a plurality of images and superimposes them to output image data of a superimposed image. The images are captured by a plurality of cameras. A processor superimposes the plurality of images to produce the superimposed image. *See* Shirakawa, Abstract. The cited portions of Shirakawa are silent with regard to a plurality of image sensor lens modules having overlapping fields of view to form a panoramic view of a scene covering three hundred sixty degrees. Accordingly, the cited portions of Shirakawa do not disclose or suggest a plurality of image sensor lens modules, each of the plurality of image sensor lens modules having a field of view, where the fields of view of the plurality of image modules overlap to form a panoramic view of a scene covering three hundred sixty degrees, as in claim 1.

Smith describes a multi-camera programmable pan-and-tilt apparatus comprising a base and a camera mechanism having a first camera and a second camera, where the second camera

includes a zoom mechanism for varying the zoom magnification of the second camera. The apparatus further has a pan-and-tilt mechanism for moving the cameras with respect to the base and a video switch receiving the video outputs of the cameras and selecting one for view. *See* Smith, Abstract. The cited portions of Smith are silent with regard to a plurality of image sensor lens modules having overlapping fields of view to form a panoramic view of a scene covering three hundred sixty degrees. Accordingly, the cited portions of Smith do not disclose or suggest a plurality of image sensor lens modules, each of the plurality of image sensor lens modules having a field of view, where the fields of view of the plurality of image modules overlap to form a panoramic view of a scene covering three hundred sixty degrees, as in claim 1.

Therefore, the cited portions of Shirakawa and Smith, individually or in combination, fail to disclose or suggest at least one element of claim 1. Hence, claim 1 is allowable. Claims 3, 35, and 36 depend from claim 1, which Applicants have shown to be allowable. Accordingly, claims 3, 35, and 36 are also allowable at least by virtue of their dependence from an allowable claim.

#### Claims 11, 21, and 34

The cited portions of the above-cited references do not disclose or suggest the specific combination of claim 11. For example, the cited portions of the above-cited references do not disclose or suggest a plurality of image modules selectively coupled to a processing engine by way of a selector, each of the plurality of image modules having a field of view, where the fields of view of the plurality of image modules overlap to form a panoramic view of a scene covering three hundred sixty degrees, as in claim 11.

As explained above, the cited portions of Shirakawa and Smith do not disclose or suggest a plurality of image modules having overlapping fields of view to form a panoramic view of a scene covering three hundred sixty degrees. Accordingly, the cited portions of Shirakawa and Smith do not disclose or suggest a plurality of image modules selectively coupled to a processing engine by way of a selector, each of the plurality of image modules having a field of view, where the fields of view of the plurality of image modules overlap to form a panoramic view of a scene covering three hundred sixty degrees, as in claim 11.

Therefore, the cited portions of Shirakawa and Smith, individually or in combination, fail to disclose or suggest at least one element of claim 11. Hence, claim 11 is allowable. Claims 21 and 34 depend from claim 11, which Applicants have shown to be allowable. Accordingly,

claims 21 and 34 are also allowable at least by virtue of their dependence from an allowable claim.

Claims 23, 26, 29, 31, and 37-38

The cited portions of the above-cited references fail to disclose or suggest the specific combination of claim 23. For example, the cited portions of the above-cited references do not disclose or suggest a plurality of digital image sensors, where each of the plurality of digital image sensors includes a field of view, where the fields of view of the plurality of image sensors overlap to form a panoramic view of a scene covering three hundred sixty degrees, as in claim 23.

As explained above, the cited portions of Shirakawa and Smith do not disclose or suggest a plurality of image sensors having overlapping fields of view to form a panoramic view of a scene covering three hundred sixty degrees. Accordingly, the cited portions of Shirakawa and Smith do not disclose or suggest a plurality of digital image sensors, where each of the plurality of digital image sensors includes a field of view, where the fields of view of the plurality of image sensors overlap to form a panoramic view of a scene covering three hundred sixty degrees, as in claim 23.

Therefore, the cited portions of Shirakawa and Smith, individually or in combination, fail to disclose or suggest at least one element of claim 23. Hence, claim 23 is allowable. Claims 26, 29, 31, 37 and 38 depend from claim 23, which Applicants have shown to be allowable. Accordingly, claims 26, 29, 31, and 37-38 are also allowable at least by virtue of their dependence from an allowable claim.

**Claim 2 is Allowable**

The Office has rejected claim 2, under 35 U.S.C. §103(a), as being unpatentable over Shirakawa in view of Smith, and further in view of U.S. Pat. No. 5,920,337 (“Glassman”). Applicants respectfully traverse the rejection.

Claim 2 depends from claim 1. As explained above, the cited portions of Shirakawa and Smith fail to disclose or suggest at least one element of claim 1. The cited portions of Glassman fail to disclose or suggest the elements of claim 1 that are not disclosed or suggested by the cited portions of Shirakawa and Smith. Glassman describes a reflective rotund lens positioned for

projecting a panoramic picture of its horizontal surroundings at a given elevation onto a CCD array. *See* Glassman, Abstract. The cited portions of Glassman do not disclose or suggest a plurality of image sensor lens modules having overlapping fields of view to form a panoramic view of a scene covering three hundred sixty degrees. Accordingly, the cited portions of Glassman do not disclose or suggest a plurality of image sensor lens modules, each of the plurality of image sensor lens modules having a field of view, where the fields of view of the plurality of image modules overlap to form a panoramic view of a scene covering three hundred sixty degrees, as in claim 1.

Therefore, the cited portions of Shirakawa, Smith, and Glassman, individually or in combination, fail to disclose or suggest at least one element of claim 1, from which claim 2 depends. Hence, claim 2 is allowable, at least by virtue of its dependence from an allowable claim.

#### **Claim 4 is Allowable**

The Office has rejected claim 4, under 35 U.S.C. §103(a), as being unpatentable over Shirakawa in view of Smith, and further in view of U.S. Pat. No. 6,791,076 (“Webster”). Applicants respectfully traverse the rejection.

Claim 4 depends from claim 1. As explained above, the cited portions of Shirakawa and Smith fail to disclose or suggest at least one element of claim 1. The cited portions of Webster fail to disclose or suggest the elements of claim 1 that are not disclosed or suggested by the cited portions of Shirakawa and Smith. Webster describes an image sensor package including an image sensor, a window, and a molding. *See* Webster, Abstract. The cited portions of Webster do not disclose or suggest a plurality of image sensor lens modules having overlapping fields of view to form a panoramic view of a scene covering three hundred sixty degrees. Accordingly, the cited portions of Webster do not disclose or suggest a plurality of image sensor lens modules, each of the plurality of image sensor lens modules having a field of view, where the fields of view of the plurality of image modules overlap to form a panoramic view of a scene covering three hundred sixty degrees, as in claim 1.

Therefore, the cited portions of Shirakawa, Smith, and Webster, individually or in combination, fail to disclose or suggest at least one element of claim 1, from which claim 4

depends. Hence, claim 4 is allowable, at least by virtue of its dependence from an allowable claim.

**Claim 6 is Allowable**

The Office has rejected claim 6, under 35 U.S.C. §103(a), as being unpatentable over Shirakawa in view of Smith, and further in view of U.S. Pat. No. 7,002,621 (“Adair”). Applicants respectfully traverse the rejection.

Claim 6 depends from claim 1. As explained above, the cited portions of Shirakawa and Smith fail to disclose or suggest at least one element of claim 1. The cited portions of Adair fail to disclose or suggest the elements of claim 1 that are not disclosed or suggested by the cited portions of Shirakawa and Smith. Adair describes a reduced area imaging device provided for use with a communication device, such as a wireless/cellular phone. *See* Adair, Abstract. The cited portions of Adair do not disclose or suggest a plurality of image sensor lens modules having overlapping fields of view to form a panoramic view of a scene covering three hundred sixty degrees. Accordingly, the cited portions of Adair do not disclose or suggest a plurality of image sensor lens modules, each of the plurality of image sensor lens modules having a field of view, where the fields of view of the plurality of image modules overlap to form a panoramic view of a scene covering three hundred sixty degrees, as in claim 1.

Therefore, the cited portions of Shirakawa, Smith, and Adair, individually or in combination, fail to disclose or suggest at least one element of claim 1, from which claim 6 depends. Hence, claim 6 is allowable, at least by virtue of its dependence from an allowable claim.

**Claim 12 is Allowable**

The Office has rejected claim 12, under 35 U.S.C. §103(a), as being unpatentable over Shirakawa in view of Smith, and further in view of U.S. Pat. Pub. No. 2004/0196379 (“Chen”). Applicants respectfully traverse the rejection.

Claim 12 depends from claim 11. As explained above, the cited portions of Shirakawa and Smith fail to disclose or suggest at least one element of claim 11. The cited portions of Chen fail to disclose or suggest the elements of claim 11 that are not disclosed or suggested by the cited portions of Shirakawa and Smith. Chen describes a compound camera system for

generating an enhanced virtual image having a large depth-of-field. *See* Chen, Abstract. The cited portions of Chen do not disclose or suggest a plurality of image modules having overlapping fields of view to form a panoramic view of a scene covering three hundred sixty degrees. Accordingly, the cited portions of Chen do not disclose or suggest a plurality of image modules selectively coupled to a processing engine by way of a selector, each of the plurality of image modules having a field of view, where the fields of view of the plurality of image modules overlap to form a panoramic view of a scene covering three hundred sixty degrees, as in claim 11.

Therefore, the cited portions of Shirakawa, Smith, and Chen, individually or in combination, fail to disclose or suggest at least one element of claim 11, from which claim 12 depends. Hence, claim 12 is allowable, at least by virtue of its dependence from an allowable claim.

#### **Claims 18 and 39 are Allowable**

The Office has rejected claims 18 and 39, under 35 U.S.C. §103(a), as being unpatentable over Shirakawa in view of Smith, and further in view of *EMS-Vision: Gaze Control in Autonomous Vehicles* (“Pellkofer”). Applicants respectfully traverse the rejections.

Claim 18 depends from claim 11. As explained above, the cited portions of Shirakawa and Smith fail to disclose or suggest at least one element of claim 11. The cited portions of Pellkofer fail to disclose or suggest the elements of claim 11 that are not disclosed or suggested by the cited portions of Shirakawa and Smith. Pellkofer describes an approach to an optimal gaze control system for autonomous vehicles. *See* Pellkofer, Abstract. The cited portions of Pellkofer do not disclose or suggest a plurality of image modules having overlapping fields of view to form a panoramic view of a scene covering three hundred sixty degrees. Accordingly, the cited portions of Pellkofer do not disclose or suggest a plurality of image modules selectively coupled to a processing engine by way of a selector, each of the plurality of image modules having a field of view, where the fields of view of the plurality of image modules overlap to form a panoramic view of a scene covering three hundred sixty degrees, as in claim 11.

Therefore, the cited portions of Shirakawa, Smith, and Pellkofer, individually or in combination, fail to disclose or suggest at least one element of claim 11, from which claim 18

depends. Hence, claim 18 is allowable, at least by virtue of its dependence from an allowable claim.

Claim 39 depends from claim 1. As explained above, the cited portions of Shirakawa and Smith fail to disclose or suggest at least one element of claim 1. The cited portions of Pellkofer fail to disclose or suggest the elements of claim 1 that are not disclosed or suggested by the cited portions of Shirakawa and Smith. Pellkofer describes an approach to an optimal gaze control system for autonomous vehicles. *See* Pellkofer, Abstract. The cited portions of Pellkofer do not disclose or suggest a plurality of image sensor lens modules having overlapping fields of view to form a panoramic view of a scene covering three hundred sixty degrees. Accordingly, the cited portions of Pellkofer do not disclose or suggest a plurality of image sensor lens modules, each of the plurality of image sensor lens modules having a field of view, where the fields of view of the plurality of image modules overlap to form a panoramic view of a scene covering three hundred sixty degrees, as in claim 1.

Therefore, the cited portions of Shirakawa, Smith, and Pellkofer, individually or in combination, fail to disclose or suggest at least one element of claim 1, from which claim 39 depends. Hence, claim 39 is allowable, at least by virtue of its dependence from an allowable claim.

### **Claim 19 is Allowable**

The Office has rejected claim 19, under 35 U.S.C. §103(a), as being unpatentable over Shirakawa in view of Smith, and further in view of U.S. Pat. Pub. No. 2001/0022627 (“Bernhardt”). Applicants respectfully traverse the rejection.

Claim 19 depends from claim 11. As explained above, the cited portions of Shirakawa and Smith fail to disclose or suggest at least one element of claim 11. The cited portions of Bernhardt fail to disclose or suggest the elements of claim 11 that are not disclosed or suggested by the cited portions of Shirakawa and Smith. Bernhardt describes a video surveillance apparatus having a dome camera with a housing and a first dome in which a video camera with a lens is disposed which is adjustable about a vertical axis of rotation and a horizontal swiveling axis. *See* Bernhardt, Abstract. The cited portions of Bernhardt do not disclose or suggest a plurality of image modules having overlapping fields of view to form a panoramic view of a scene covering three hundred sixty degrees. Accordingly, the cited portions of Bernhardt do not

disclose or suggest a plurality of image modules selectively coupled to a processing engine by way of a selector, each of the plurality of image modules having a field of view, where the fields of view of the plurality of image modules overlap to form a panoramic view of a scene covering three hundred sixty degrees, as in claim 11.

Therefore, the cited portions of Shirakawa, Smith, and Bernhardt, individually or in combination, fail to disclose or suggest at least one element of claim 11, from which claim 19 depends. Hence, claim 19 is allowable, at least by virtue of its dependence from an allowable claim.

### **Claims 8, 25, and 28 are Allowable**

The Office has rejected claims 8, 25, and 28, under 35 U.S.C. §103(a), as being unpatentable over Shirakawa in view of Smith, and further in view of U.S. Pat. No. 7,023,913 (“Monroe”). Applicants respectfully traverse the rejections.

Claim 8 depends from claim 1. As explained above, the cited portions of Shirakawa and Smith fail to disclose or suggest at least one element of claim 1. The cited portions of Monroe fail to disclose or suggest the elements of claim 1 that are not disclosed or suggested by the cited portions of Shirakawa and Smith. Monroe describes a fully digital camera system that provides high-resolution still image and streaming video signals via a network to a centralized server supported security and surveillance system. The camera employs, or connects to, a variety of sensors other than the traditional image sensor, such as a motion sensor. *See* Monroe, Abstract. The cited portions of Monroe do not disclose or suggest a plurality of image sensor lens modules having overlapping fields of view to form a panoramic view of a scene covering three hundred sixty degrees. Accordingly, the cited portions of Monroe do not disclose or suggest a plurality of image sensor lens modules, each of the plurality of image sensor lens modules having a field of view, where the fields of view of the plurality of image modules overlap to form a panoramic view of a scene covering three hundred sixty degrees, as in claim 1.

Therefore, the cited portions of Shirakawa, Smith, and Monroe, individually or in combination, fail to disclose or suggest at least one element of claim 1, from which claim 8 depends. Hence, claim 8 is allowable, at least by virtue of its dependence from an allowable claim.



Claims 25 and 28 depend from claim 23. As explained above, the cited portions of Shirakawa and Smith fail to disclose or suggest at least one element of claim 23. The cited portions of Monroe fail to disclose or suggest the elements of claim 23 that are not disclosed or suggested by the cited portions of Shirakawa and Smith. As explained above, the cited portions of Monroe do not disclose or suggest a plurality of image sensors having overlapping fields of view to form a panoramic view of a scene covering three hundred sixty degrees. Accordingly, the cited portions of Monroe do not disclose or suggest a plurality of digital image sensors, where each of the plurality of digital image sensors includes a field of view, where the fields of view of the plurality of image sensors overlap to form a panoramic view of a scene covering three hundred sixty degrees, as in claim 23.

Therefore, the cited portions of Shirakawa, Smith, and Monroe, individually or in combination, fail to disclose or suggest at least one element of claim 23, from which claims 25 and 28 depend. Hence, claims 25 and 28 are allowable, at least by virtue of their dependence from an allowable claim.

#### **Claim 40 is Allowable**

The Office has rejected claim 40, under 35 U.S.C. §103(a), as being unpatentable over Shirakawa in view of Smith in view of Pellkofer, and further in view of Monroe. Applicants respectfully traverse the rejection.

Claim 40 depends from claim 39, which depends from claim 1. As explained above regarding the rejection of claim 39, the cited portions of Shirakawa, Smith, and Pellkofer fail to disclose or suggest at least one element of claim 1. The cited portions of Monroe fail to disclose or suggest the elements of claim 1 that are not disclosed or suggested by the cited portions of Shirakawa, Smith, and Pellkofer. As explained above, the cited portions of Monroe do not disclose or suggest a plurality of image sensor lens modules having overlapping fields of view to form a panoramic view of a scene covering three hundred sixty degrees. Accordingly, the cited portions of Monroe do not disclose or suggest a plurality of image sensor lens modules, each of the plurality of image sensor lens modules having a field of view, where the fields of view of the plurality of image modules overlap to form a panoramic view of a scene covering three hundred sixty degrees, as in claim 1.

Therefore, the cited portions of Shirakawa, Smith, Pellkofer, and Monroe, individually or in combination, fail to disclose or suggest at least one element of claim 1, from which claim 40 depends. Hence, claim 40 is allowable, at least by virtue of its dependence from an allowable claim.

**Claims 17, 41 and 42 are Allowable**

The Office has rejected claims 17, 41, and 42, under 35 U.S.C. §103(a), as being unpatentable over Shirakawa in view of Smith, and further in view of U.S. Pat. No. 7,015,954 ("Foote"). Applicants respectfully traverse the rejections.

Claim 17 depends from claim 11. As explained above, the cited portions of Shirakawa and Smith fail to disclose or suggest at least one element of claim 11. The cited portions of Foote fail to disclose or suggest the elements of claim 11 that are not disclosed or suggested by the cited portions of Shirakawa and Smith. Foote describes a camera array that captures component images which are combined into a single scene from which "panning" and "zooming" within the scene are performed. A scene captured by the camera array is zoomed or selectively steered to an area of interest. This zooming or steering, being done in the digital domain, is performed nearly instantaneously when compared to cameras with mechanical zoom and steering functions. *See* Foote, Abstract. Foote further describes that a motion analysis may serve to control a virtual camera to select the portion of a panoramic image that contains a moving object. *See* Foote, col. 13, lines 63-65. The cited portions of Foote do not disclose or suggest a plurality of image modules having overlapping fields of view to form a panoramic view of a scene covering three hundred sixty degrees. Accordingly, the cited portions of Foote do not disclose or suggest a plurality of image modules selectively coupled to a processing engine by way of a selector, each of the plurality of image modules having a field of view, where the fields of view of the plurality of image modules overlap to form a panoramic view of a scene covering three hundred sixty degrees, as in claim 11.

Therefore, the cited portions of Shirakawa, Smith, and Foote, individually or in combination, fail to disclose or suggest at least one element of claim 11, from which claim 17 depends. Hence, claim 17 is allowable, at least by virtue of its dependence from an allowable claim.

Claims 41 and 42 depend from claim 1. As explained above, the cited portions of Shirakawa and Smith fail to disclose or suggest at least one element of claim 1. The cited portions of Foote fail to disclose or suggest the elements of claim 1 that are not disclosed or suggested by the cited portions of Shirakawa and Smith. As explained above, the cited portions of Foote do not disclose or suggest a plurality of image sensor lens modules having overlapping fields of view to form a panoramic view of a scene covering three hundred sixty degrees. Accordingly, the cited portions of Foote do not disclose or suggest a plurality of image sensor lens modules, each of the plurality of image sensor lens modules having a field of view, where the fields of view of the plurality of image modules overlap to form a panoramic view of a scene covering three hundred sixty degrees, as in claim 1.

Therefore, the cited portions of Shirakawa, Smith, and Foote, individually or in combination, fail to disclose or suggest at least one element of claim 1, from which claims 41 and 42 depend. Hence, claims 41 and 42 are allowable, at least by virtue of their dependence from an allowable claim.

#### **Claim 9 is Allowable**

The Office has rejected claim 9, under 35 U.S.C. §103(a), as being unpatentable over Shirakawa in view of Smith in view of Monroe in view of Glassman, and further in view of U.S. Pat. Pub. No. 2004/0085445 (“Park”). Applicants respectfully traverse the rejection.

Claim 9 depends from claim 8, which depends from claim 1. As explained above regarding the rejection of claim 8, the cited portions of Shirakawa, Smith, and Monroe fail to disclose or suggest at least one element of claim 1. The cited portions of Glassman and Park fail to disclose or suggest the elements of claim 1 that are not disclosed or suggested by the cited portions of Shirakawa, Smith, and Monroe. Glassman describes a reflective rotund lens positioned for projecting a panoramic picture of its horizontal surroundings at a given elevation onto a CCD array. *See* Glassman, Abstract. The cited portions of Glassman do not disclose or suggest a plurality of image sensor lens modules having overlapping fields of view to form a panoramic view of a scene covering three hundred sixty degrees. Accordingly, the cited portions of Glassman do not disclose or suggest a plurality of image sensor lens modules, each of the plurality of image sensor lens modules having a field of view, where the fields of view of the

plurality of image modules overlap to form a panoramic view of a scene covering three hundred sixty degrees, as in claim 1.

Park describes a video security system and a method for operating the video security system. The video security system includes a video camera including circuits for using encrypting data or inserting a security signal, thereby generating a secured video signal for transmission. *See* Park, Abstract. The cited portions of Park do not disclose or suggest a plurality of image sensor lens modules having overlapping fields of view to form a panoramic view of a scene covering three hundred sixty degrees. Accordingly, the cited portions of Park do not disclose or suggest a plurality of image sensor lens modules, each of the plurality of image sensor lens modules having a field of view, where the fields of view of the plurality of image modules overlap to form a panoramic view of a scene covering three hundred sixty degrees, as in claim 1.

Therefore, the cited portions of Shirakawa, Smith, Monroe, Glassman, and Park, individually or in combination, fail to disclose or suggest at least one element of claim 1, from which claim 9 depends. Hence, claim 9 is allowable, at least by virtue of its dependence from an allowable claim.

#### **Claim 43 is Allowable**

The Office has rejected claim 43, under 35 U.S.C. §103(a), as being unpatentable over Shirakawa in view of Smith in view of Pellkofer, and further in view of U.S. Pat. No. 7,425,984 (“Chen”). Applicants respectfully traverse the rejection.

Claim 43 depends from claim 11. As explained above, the cited portions of Shirakawa, Smith, and Pellkofer fail to disclose or suggest at least one element of claim 11. The cited portions of Chen fail to disclose or suggest the elements of claim 11 that are not disclosed or suggested by the cited portions of Shirakawa, Smith, and Pellkofer. Chen describes a compound camera system for generating an enhanced virtual image having a large depth-of-field. *See* Chen, Abstract. The cited portions of Chen do not disclose or suggest a plurality of image modules having overlapping fields of view to form a panoramic view of a scene covering three hundred sixty degrees. Accordingly, the cited portions of Chen do not disclose or suggest a plurality of image modules selectively coupled to a processing engine by way of a selector, each of the plurality of image modules having a field of view, where the fields of view of the plurality

of image modules overlap to form a panoramic view of a scene covering three hundred sixty degrees, as in claim 11.

Therefore, the cited portions of Shirakawa, Smith, Pellkofer, and Chen, individually or in combination, fail to disclose or suggest at least one element of claim 11, from which claim 43 depends. Hence, claim 43 is allowable, at least by virtue of its dependence from an allowable claim.

#### **Claim 47 is Allowable**

The Office has rejected claim 47, under 35 U.S.C. §103(a), as being unpatentable over Shirakawa in view of Smith, and further in view of Park. Applicants respectfully traverse the rejection.

Claim 47 depends from claim 23. As explained above, the cited portions of Shirakawa and Smith fail to disclose or suggest at least one element of claim 23. The cited portions of Park fail to disclose or suggest the elements of claim 23 that are not disclosed or suggested by the cited portions of Shirakawa and Smith. As explained above, the cited portions of Park do not disclose or suggest a plurality of image sensors having overlapping fields of view to form a panoramic view of a scene covering three hundred sixty degrees. Accordingly, the cited portions of Park do not disclose or suggest a plurality of digital image sensors, where each of the plurality of digital image sensors includes a field of view, where the fields of view of the plurality of image sensors overlap to form a panoramic view of a scene covering three hundred sixty degrees, as in claim 23.

Therefore, the cited portions of Shirakawa, Smith, and Park, individually or in combination, fail to disclose or suggest at least one element of claim 23, from which claim 47 depends. Hence, claim 47 is allowable, at least by virtue of its dependence from an allowable claim.

#### **New Claim 48 is Allowable**

Claim 48 depends from claim 1, which Applicants have shown to be allowable. Therefore, claim 48 is allowable, at least by virtue of its dependence from an allowable claim. Further, claim 48 recites additional elements that are not disclosed or suggested by the cited portions of the above-cited references.

For example, the cited portions of the above-cited references fail to disclose or suggest that “each of the plurality of image sensor lens modules includes an orientation with a centerline, wherein the orientations of the plurality of image sensor lens modules are equally spaced,” as in claim 48. For at least this additional reason, claim 48 is allowable.

### **CONCLUSION**

Applicants have pointed out specific features of the claims not disclosed, suggested, or rendered obvious by the references applied in the Office Action. Accordingly, Applicants respectfully request reconsideration and withdrawal of each of the objections and rejections, as well as an indication of the allowability of each of the pending claims.

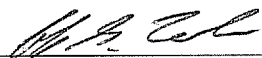
Any changes to the claims in this response that have not been specifically noted to overcome a rejection based upon the cited references should be considered to have been made for a purpose unrelated to patentability and no estoppel should be deemed to attach thereto.

The Examiner is invited to contact the undersigned attorney at the telephone number listed below if such a call would in any way facilitate allowance of this application.

The Commissioner is hereby authorized to charge any fees, which may be required, or credit any overpayment, to Deposit Account Number 50-2469.

Respectfully submitted,

3-7-2011  
Date

  
Jeffrey G. Toler, Reg. No. 38,342  
TOLER LAW GROUP  
8500 Bluffstone Cove, Suite A201  
Austin, TX 78759  
Telephone: (512) 327-5515  
Facsimile: (512) 327-5575